Amendments to the Specification:

Please replace the paragraph bridging pages 1 and 2 with the following amended paragraph:

In accordance with the present invention there has been discovered a process for producing an ammonium polythiomolybdate or a hydrate thereof of the formula $(NH_4)_2Mo_3S_{13} \cdot n\,H_2O$ where n is 0, 1 or 2 comprising:

(a) reacting an aqueous ammoniacal molybdate solution with hydrogen sulfide gas in a closed system at superatmospheric pressure, preferably 5-50 psig, for about 1 to 6 hours or until the hydrogen sulfide is no longer absorbed by the solution, ~~said solution and said gas being in a closed system and the flow of said gas being regulated at an elevated pressure~~ to form a slurry ~~consisting essentially~~ of ~~a~~ solid ~~essentially all of which is~~ ammonium tetrathiomolybdate containing a portion of the starting molybdenum ~~and~~ in a mother liquor containing the balance of the molybdenum;

(b) heat soaking ~~the reaction product of step (a)~~ the slurry of step (a) in the presence of elemental ~~sulfur at elevated temperatures up to about 200°C~~, preferably at a temperature of about 175-200°C., in a closed reactor at a pressure of about 600-1000 psig whereby the ammonium tetrathiomolybdate is converted to $(NH_4)_2Mo_3S_{13} \cdot n\,H_2O$;

(c) cooling ~~said~~ the slurry of step (b) to ambient temperature;

(d) separating said solid from the major portion of said mother liquor;

(e) washing said solid with water ~~followed by removing the resulting water washes~~ to remove the remaining portion of said mother liquor and soluble impurities from said solid; and

(f) drying the resulting washed solid ~~at ambient temperature to form the final $(NH_4)_2Mo_3S_{13} \cdot n\,H_2O$, n being 0, 1 or 2, which is preferably $(NH_4)_2Mo_3S_{13}$~~.

Please replace the first full paragraph of page 3 with the following amended paragraph:

The starting source of molybdate in the process of this invention is an aqueous ammoniacal ~~ammonium~~ molybdate solution comprising ammonium polysulfide, which is a mixture of $(NH_4)_2S$ and elemental sulfur, S_8, and in which solution the raw material source of molybdenum may be MoO_3, $(NH_4)_2Mo_2O_7$ or $(NH_4)_6Mo_7O_{24}$. Molybdenum concentration may be 5 to 300 grams of Mo per liter.

Please replace the second full paragraph of page 3 with the following amended paragraph:

The aqueous ammoniacal molybdate solution is reacted ~~in a closed system~~ with hydrogen sulfide gas, ~~the flow of the gas being regulated~~ at ~~an elevated~~ a superatmospheric pressure, preferably a pressure of about 5 to about 50 psig, for about 1 to 6 hours, to form a slurry ~~consisting essentially~~ of ~~a~~ solid ~~essentially all of which is~~ ammonium tetrathiomolybdate containing a portion of the starting molybdenum ~~and~~ in a mother liquor containing the balance of the molybdenum. The length of time of the gassing procedure depends on the size of the reaction vessel, the amount of molybdenum charged, and the actual pressure of the hydrogen sulfide gas.

Please replace the third full paragraph of page 3 with the following amended paragraph:

The reaction is done in a closed system. Therefore only the hydrogen sulfide which is absorbed and reacted ~~will be~~ is drawn off the source of the gas~~, therefore~~ and no gas is wasted. A gas regulator on the hydrogen sulfide gas line maintains the pressure inside the sealed reaction tank at the desired pressure. As the hydrogen sulfide is used up by the reaction to form the ammonium tetrathiomolybdate, the pressure inside the tank is effectively decreased. This causes the hydrogen sulfide gas regulator to allow more gas into the tank until the pressure stabilizes at the desired pressure. As the hydrogen sulfide is reacted more is admitted to the reaction tank. Since the reaction to form the ammonium tetrathiomolybdate is exothermic, the temperature will be elevated by about 20°C to about 30° C during the reaction. When the temperature begins to drop, it indicates that the reaction has reached completion. The contents of the reaction tank have therefore reached equilibrium and the flow of the hydrogen sulfide gas stops.

Please replace the paragraph bridging pages 4 and 5 with the following amended paragraph:

This novel process requires the reaction to be conducted in a high pressure vessel. The raw materials can all be charged into a single reactor or the MOX (molybdic oxide) powder can be premixed in a separate vessel along with the ML (mother liquor) and then charged into the main reactor (pre-charging the MOX with ML and mixing for 30-60 minutes saves cycle-time). After the charges are complete ~~into the main reactor~~, the reactor is closed up, purged with inert gas (N_2) and hydrogen sulfide gas is fed to the reactor. A pressure between 25 psig and 50 psig is maintained while applying cooling water to the reactor jacket and/or coils. Once the exotherm is complete, H_2S feed is stopped and the contents are heated ~~up~~. The pressure in the reactor increases with the vapor pressure of the contents as the temperature goes up. The reaction mass is heat soaked and then cooled. Once the batch is completed and cooled down, the solids are recovered by filtration and then dried. ~~It~~ The resulting product can then be directly dropped/packaged into super-sacks after confirming the material is dry. See table below for sequence and cycle-times.